

III. CLAIM AMENDMENTS

1. (Currently Amended) An optoelectronic module, ~~including~~comprising:

an optical radiation source ~~(T)~~ having associated an output transmission path ~~(V1, V2, C1)~~ for an output optical radiation generated by said source ~~(T)~~,

an optical radiation detector ~~(R)~~ having associated an input transmission path ~~(C2, V3, V4)~~ for an input optical radiation to be detected by said detector ~~(R)~~,

~~characterised in that~~ the module ~~includes~~further comprising, as an integral part thereof, a loop-back arrangement ~~(M1, M2, M12, VOA, OW)~~ selectively activatable to cause said output optical radiation generated by said source ~~(T)~~ to at least partly propagate from said output transmission path ~~(V1)~~ towards said input transmission path ~~(V4)~~, whereby said optical radiation generated by said source ~~(T)~~ is directed towards said optical detector ~~(R)~~ to be detected thereby.

2. (Currently Amended) The module of claim 1, ~~characterised in that~~wherein said loop-back arrangement includes at least one loop-back element ~~(M1, M2, M12)~~ adapted to have a surface reflectively interposed in at least one of said output transmission path ~~(V1, V2)~~ and said input transmission path ~~(V3, V4)~~ to reflect optical radiation generated by said source ~~(T)~~ towards said optical detector ~~(R)~~.

3. (Currently Amended) The module of claim 2, ~~characterised in that~~ wherein said at least one loop-back element includes a mirror ~~(M1, M2, M12)~~ having a reflective surface adapted to be selectively moved between a first position, wherein said reflective surface is located away from said at least one of said output transmission path ~~(V1, V2)~~ and said input

transmission path ~~(V3, V4)~~ and a second position wherein said reflective surface intercepts at least one of said output transmission path ~~(V1, V2)~~ and said input transmission path ~~(V3, V4)~~.

4. (Currently Amended) The module of claim 2, characterised ~~in that~~ wherein said at least one loop-back element includes a stationary mirror ~~(M1, M2, M12)~~ selectively switchable between a first condition, wherein said mirror ~~(M1, M2, M12)~~ is substantially transparent to optical radiation propagating therethrough and a second condition, wherein said mirror exhibits said surface reflectively interposed in at least one of said output transmission path ~~(V1, V2)~~ and said input transmission path ~~(V3, V4)~~.

5. (Currently Amended) The module of ~~any claims 2 to 4~~ claim 2, characterised ~~in that~~ wherein said loop-back arrangement includes first ~~(M1)~~ and second ~~(M2)~~ loop-back elements, said first loop-back element ~~(M1)~~ adapted to have a first surface reflectively interposed in said output transmission path ~~(V1, V2)~~ to reflect optical radiation generated by said source ~~(T)~~ towards said second loop-back element ~~(M2)~~; said second loop-back element ~~(M)~~ adapted to have a second surface for reflectively receiving said optical radiation reflected by said first loop-back element ~~(M1)~~ and direct said reflected radiation towards said optical detector ~~(R)~~.

6. (Currently Amended) The module of ~~any of the previous claims, characterised in that~~ claim 5, wherein said loop-back arrangement includes an optical attenuator ~~(VOA)~~ arranged to be traversed by optical radiation propagating from said source ~~(T)~~ towards said optical detector ~~(R)~~.

7. The module of ~~claims 5 and 6, characterised in that~~ claim 6, wherein said optical attenuator ~~(VOA)~~ is interposed between said first ~~(M1)~~ and second ~~(M2)~~ loop-back elements.

8. (Currently Amended) The module of claim 6, ~~characterised in that~~ wherein said optical attenuator ~~(VOA)~~ is a variable optical attenuator adapted to be selectively switched between a first, high loss condition, wherein said variable optical attenuator ~~(VOA)~~ substantially prevents propagation of optical radiation from said source ~~(T)~~ towards said detector ~~(R)~~ and a second, low loss condition, wherein said variable optical attenuator ~~(VOA)~~ permits propagation of optical radiation from said source ~~(T)~~ towards said detector ~~(R)~~.

9. (Currently Amended) The module of ~~claims 7 and 8,~~ ~~characterised in that~~ claim 7, wherein said first ~~(M1)~~ and second ~~(M2)~~ loop-back elements are mirrors having a high straight through coupling/reflection ratio.

10. (Currently Amended) The module of ~~claim 5 and claim 6,~~ ~~characterised in that~~ 6, wherein said optical attenuator ~~(VOA)~~ is a variable optical attenuator interposed between said source ~~(T)~~ and said first loop-back element ~~(M1)~~.

11. (Currently Amended) The module of ~~any of claims 2 to 6,~~ ~~characterised in that~~ claim 2, wherein said optical radiation source ~~(T)~~ and said optical radiation detector ~~(R)~~ are arranged so that said output transmission path ~~(V1, V2)~~ and said input radiation path ~~(V3, V4)~~ intersect at a point of intersection and in that a single loop-back element ~~(M12)~~ is provided adapted to have said surface reflectively located substantially at said point of intersection.

12. (Currently Amended) The module of ~~claim 6 and claim 11,~~ ~~characterised in that~~ said ~~wherein~~ a variable optical attenuator ~~(VOA)~~ is interposed between said optical source ~~(T)~~ and said single loop-back element ~~(M12)~~.

13. (Currently Amended) The module of ~~any of the previous claims,~~ ~~characterised in that~~ claim 1, wherein said optical

radiation source ~~(T)~~ has associated an optical isolator ~~(IS)~~ arranged at ~~the~~an upstream end of said loop-back arrangement.

14. (Currently Amended) The module of ~~any of the previous~~
~~claims, characterised in that~~claim 1, wherein said loop-back
arrangement is in the form of a planar lightwave circuit
~~(PLC)~~.